## Technical Cybersecurity

Python

## Using Python

#### WE WILL USE A SIGNIFICANT AMOUNT OF PYTHON!

- It's straightforward
- It has great data support and imports system libraries via the ctypes module
- It has great experimental and command line support
- Great for packet manipulation via the scapy module
- Variety of fuzzing frameworks (AFL, Sulley, Fuzzing, others)

## I don't know Python!

#### WHERE TO START?

- Well, this isn't a python class but there's lots of resources
- Start here: <a href="https://www.python.org/about/gettingstarted/">https://www.python.org/about/gettingstarted/</a>
- This will get you started!

#### SYNTAX IS PRETTY EASY

- Use python 3.x, not python 2.x
- You may need 2.x for some modules though
- ...so let's check out virtual environments!

### Tools!

#### USE VIRTUAL ENVIRONMENTS

- see: <a href="https://virtualenvwrapper.readthedocs.io/en/latest/">https://virtualenvwrapper.readthedocs.io/en/latest/</a>
- \$ mkvirtualenv hack

#### THEN INSTALL A FEW TOOLS

- I always use these so start with them:
- (hack) \$ pip install ipython jupyter ipdb

# Okay, onto attack vectors!